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ASSESSMENT OF DRUG UTILIZATION PATTERNS AND COSTS FOR ERYTHROPOIETIC STIMULATING AGENTS IN ELDERLY PATIENTS WITH CHRONIC KIDNEY DISEASELafeuille MH¹, Lefebvre P¹, Bookhart B², Laliberte F¹, Bailey R², Corral M², Piech CT²¹Groupe d'analyse, Ltee, Montreal, QC, Canada, ²Ortho Biotech Clinical Affairs, LLC, Bridgewater, NJ, USA

OBJECTIVE: The current study examined recent epoetin alfa (EPO) and darbepoetin alfa (DARB) treatment patterns and corresponding drug costs in elderly patients with chronic kidney disease (CKD) not receiving dialysis. **METHODS:** A medical claims analysis was conducted from January 2004 through June 2007 using the Ingenix Impact National Managed Care Database. Patients included in the study were ≥ 65 years, had ≥ 1 claim for CKD, and were newly initiated on EPO or DARB and received ≥ 2 doses. Patients diagnosed with cancer or receiving chemotherapy were excluded. Mean cumulative dose was used to calculate drug costs, based on October 2007 wholesale acquisition unit prices (EPO \$12.52/1000 Units; DARB \$4.628/mcg). **RESULTS:** The study population consisted of 538 patients who received EPO and 302 patients who received DARB. The EPO group was slightly older (EPO 74.4 years, DARB 73.5 years, $p = 0.0161$) with less women (EPO: 46%; DARB: 54%, $p = 0.0241$), compared to the DARB group. Mean treatment duration was slightly longer for the EPO group (EPO 71 days, DARB 62 days, $p = 0.0516$). Extended dosing frequency (defined as every 2 weeks or greater, $\geq Q2W$) during treatment was observed in the majority of patients in both groups (EPO—QW: 32%, $\geq Q2W$: 68%; DARB—QW: 9%, $\geq Q2W$: 91%). The mean cumulative dose (SD) was 154,314 (155,758) Units for EPO and 558 (470) mcg for DARB, resulting in a dose ratio of 277:1 (Units EPO: mcg DARB). Based on these doses, drug cost was 25% lower for EPO than for DARB (EPO \$1932; DARB \$2580; $p < 0.0001$). After adjusting for confounding factors, drug cost of EPO remained significantly lower than DARB. **CONCLUSION:** This study of CKD patients not on dialysis reported significantly lower drug cost in the EPO group compared to the DARB group and a dose ratio of 277:1.

DU7

NATIONAL ESTIMATES AND DETERMINANTS OF DEPRESSION AND ANTIDEPRESSANT TREATMENT IN CANCER PATIENTS IN THE UNITED STATES, 2004–2005

Sankaranarayanan J, Smith LM, Meza J, Burke WJ

University of Nebraska Medical Center, Omaha, NE, USA

OBJECTIVE: Though the 2003-year National Institutes of Health (NIH) consensus recommends study of depression and its treatment in cancer, real-world information is limited. Our objective was to examine national estimates and determinants of depression and antidepressant-treatment in cancer patients to inform providers and payers. **METHODS:** We conducted retrospective analysis of a nationally representative pooled sample of 45,557 respondents from 2004 and 2005 years of the Medical Expenditure Panel Survey (MEPS). We extracted data on ≥ 18 year-old adult respondents in United States (U.S.) about ICD-9-CM-code based medical conditions (depression, cancers of the breast, prostate, colon, rectum, lung, and head and neck), age, gender, race, income, health insurance, comorbidity, health-status (physical, mental), and antidepressant-treatment (Selective Serotonin Reuptake Inhibitor, SSRI; Tricyclic, TCA; or nonSSRI/TCA). We weighted sample estimates of depression in cancer and general population, and antidepressant-treatment in cancer, projected to the population, and calculated 95% confidence limits (CL) using the Taylor expansion method in SAS-callable

SUDAAN. In multivariate logistic regression, after controlling for age, race, health insurance, poverty, health-status, and comorbidity, we examined determinants of depression and antidepressant-treatment in cancer patients. **RESULTS:** Cancer patients were 42% more likely than the general U.S. population to have depression (rate: 12.7% vs. 9.3%, OR 1.42, 95% CL: 1.04–1.95, $p = 0.024$). Among cancer patients receiving an antidepressant, the majority received an SSRI (68%) versus a TCA (22%) or nonSSRI/TCA (23%). In multivariate analyses of cancer patients, women were 3.3 times more likely to be diagnosed with depression than men ($p = 0.0003$), those with fair/poor physical health-status were 2.5 times more likely to be diagnosed with depression than those with good/excellent physical health-status ($p = 0.0023$), and those with depression were 24.3 times more likely to receive an antidepressant than those without depression ($p < 0.001$). **CONCLUSION:** Increased burden of depression in cancer patients with fair/poor physical health-status warrants early diagnosis of depression for its treatment.

DU8

THE EFFECT OF THREE-TIER FORMULARY ADOPTION FOR ALPHA-BLOCKERS ON DRUG UTILIZATION IN THE DEPARTMENT OF DEFENSE

Devine JW, Conrad RC, Tiller KW

Department of Defense Pharmacoeconomic Center, Fort Sam Houston, TX, USA

OBJECTIVE: We examined the effect of three-tiered formulary implementation on drug utilization and expenditures in the Military Health System (MHS) after a leading uroselective alpha-blocker (tamsulosin) was restricted to non-formulary (third-tier) status. **METHODS:** We evaluated 28 months of pharmacy claims data for individuals covered under the TRICARE Pharmacy Program, a federally funded benefit available to all eligible Uniformed Services members, their families, and retirees. The study patients ($N = 266,380$) were men, 45 years of age or older, with at least one prescription for an alpha-blocker (AB) dispensed between October 2004 and February 2007. The new policy limited the availability of tamsulosin at military treatment facilities, increased patient cost-sharing obligations for tamsulosin in the TRICARE Retail Network and Mail Order pharmacy, and designated alfuzosin as the preferred uroselective alpha-blocker in the MHS during 12 months (months 17 through 28) of the study. We used segmented regression models to estimate the effect of the new policy on the use of ABs in the Military Health System with respect to drug utilization and drug expenditures. **RESULTS:** We observed an abrupt decline (29%) in the use of the third-tier AB following the decision ($p < 0.001$). Concurrently, use of the preferred uroselective product increased three-fold and continued to grow at a faster monthly rate than predicted from pre-implementation data ($p < 0.001$). Overall, the utilization of uroselective ABs decreased slightly (11%) in the month following the decision ($p < 0.001$) but then returned to baseline levels during the post-policy period. The policy reduced drug expenditures for ABs by an estimated \$5.6 million during its first 12 months. **CONCLUSION:** Implementation of a three-tiered formulary system for alpha-blockers in the Department of Defense led to a reduction in drug expenditures through increased utilization of preferred products and higher cost-sharing obligations for non-formulary drugs.